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PROFESSIONAL APPOINTMENTS

Associate Professor, Dept. of Fisheries and Wildlife, Oregon State University	July 2014-present
Assistant Professor, Dept. of Fisheries and Wildlife, Oregon State University	July 2008-June 2014
Postdoctoral Fellow, NSF-International Research Fellowship Program	Aug. 2006-July 2008
Postdoctoral Researcher, University of California, Berkeley	June 2005-Aug. 2006
Researcher, California Dept. of Fish and Game	Sept. 2001-May 2005

EDUCATION

University of California, Berkeley, Ph.D. Environmental Science, Policy, and Management, Dec. 2004
Dissertation title: "Population processes in a changing climate: extinction, dispersal, and metapopulation dynamics of desert bighorn sheep in California"

Rice University, B.A. Biology, *Summa cum Laude*, May 1997

Honors thesis: "Evaluation of black bear habitat in the Big Thicket National Preserve, Texas"

PUBLICATIONS (DOWNLOAD ABLE AT [HTTP://FW.OREGONSTATE.EDU/LABS/EPPS/PUBS.HTML](http://fw.oregonstate.edu/labs/epps/pubs.html))

- Castillo, J. A., C. W. Epps, M. R. Jeffress, C. Ray, T. Rodhouse, D. Schwalm, & N. Schumacker. *In press*. Replicated landscape genetic and network analyses reveal wide variation in functional connectivity for American pikas. *Ecological Applications*.
- Moriarty, K., C. W. Epps, & W. Zielinski. *In press*. Forest thinning for fuel reduction changes movement patterns and habitat use by Pacific marten. *Journal of Wildlife Management*.
- Epps, C. W., J. D. Wehausen, W. B. Sloan, S. Holt, T. G. Creech, R. S. Crowhurst, J. R. Jaeger, K. M. Longshore, & R. J. Monello. *In press*. Fifty years after Welles and Welles: distribution and genetic structure of desert bighorn sheep in Death Valley National Park. **Proceedings of the 1st Annual Death Valley Natural History Conference**, Death Valley National Park, California.
- Schwalm, D., C. W. Epps, T. J. Rodhouse, W. B. Monahan, J. A. Castillo, C. Ray, & M. R. Jeffress. 2016. Habitat availability and gene flow influence diverging population trajectories for American pikas under climate change. **Global Change Biology** 22(4):1572-1584.
- Creech, T. G., C. W. Epps, & J. D. Wehausen. 2016. Predicting diet quality and genetic diversity of Mojave Desert bighorn sheep using NDVI. **Journal of Arid Environments** 127:160-170.
- Epps, C. W., & N. Keyghobadi. 2015. Landscape genetics in a changing world: disentangling historical and contemporary influences and inferring change. **Molecular Ecology** 24:6021-6040.
- Waits, L., & C. W. Epps. 2015. Population genetics and habitat. Pp. 63-83 in M. L. Morrison & H. A. Mathewson, eds. *Wildlife Habitat Conservation: Concepts, Challenges, and Solutions*. Johns Hopkins University Press, Baltimore, Maryland. 185 pages.
- Moriarty, K. M. & C. W. Epps. 2015. Influence of stored satellite information on global positioning system (GPS) collar performance in a forested ecosystem: an experiment with miniature GPS devices (<60g). **Wildlife Society Bulletin** 39:349-357.

- Epps, C. W.**, K. Nowak, B. M. Mutayoba. 2015. Unfenced reserves, unparalleled biodiversity, and a rapidly-changing landscape: roadways and wildlife in East Africa. Chapter 39e in R. van der Ree, D. Smith, C. Grilo, eds. *Road Ecology*. Wiley-Blackwell. Hoboken, New Jersey.
- Epps, C. W.** 2014. Considering the switch: challenges of transitioning to non-lead ammunition. **The Condor: Ornithological Applications** 116:429-434.
- Creech, T. G., **C. W. Epps**, R. Monello, and J. D. Wehausen. 2014. Using network theory to prioritize management in a desert bighorn sheep metapopulation. **Landscape Ecology** 29:605-619.
- Wilder, B. T., J. L. Betancourt, **C. W. Epps**, R. S. Crowhurst, J. I. Mead, & E. Excurra. 2014. Local extinction and unintentional rewilding of bighorn sheep (*Ovis canadensis*) on a desert island. **PloSOne** 9:e91358.
- Castillo, J. A., **C. W. Epps**, A. R. Davis, & S. A. Cushman. 2014. Landscape effects on gene flow for a climate-sensitive montane species, the American pika. **Molecular Ecology** 23:843-856.
- Jeffress, M. R., T. J. Rodhouse, C. Ray, S. Wolff, & **C. W. Epps**. 2013. The idiosyncrasies of place: geographic variation in the climate-distribution relationships of the American pika. **Ecological Applications** 23:864-878.
- Epps, C. W.**, S. K. Wasser, J. L. Keim, B. M. Mutayoba, & J. S. Brashares. 2013. Quantifying past and present connectivity illuminates a rapidly changing landscape for the African elephant. **Molecular Ecology** 22:1574-1588.
- Epps, C. W.**, J. A. Castillo, A. Schmidt-Küntzel, P. du Preez, G. Stuart-Hill, M. Jago, & R. Naidoo. 2013. Contrasting historical and recent gene flow among African buffalo herds in the Caprivi Strip of Namibia. **Journal of Heredity** 104:172-181.
- Crowhurst, R. S., T. D. Mullins, B. M. Mutayoba, & **C. W. Epps**. 2013. Characterization of eight polymorphic loci for Maasai giraffe (*Giraffa camelopardalis tippelskirchi*) using non-invasive genetic samples. **Conservation Genetics** 5:85-87.
- Rudnick, D., S. Ryan, P. Beier, S. Cushman, **C. W. Epps**, L. Gerber, J. Hartter, J. Jenness, J. Kintsch, A. Merenlander, R. Perkl, D. Preziosi, & S. Trombulak. 2012. Emerging principles in understanding landscape connectivity: practical tools for conservation decision-making. **Issues in Ecology Report No. 16**.
- Cordero, A. G., & **C. W. Epps**. 2012. From desert to rainforest: morphological variation in the bushy-tailed woodrat (*Neotoma cinerea*) is associated with a prominent climatic gradient. **Journal of Mammalian Evolution** 19:135-153.
- Epps, C. W.**, B. M. Mutayoba, L. E. Gwin, & J. S. Brashares. 2011. An empirical evaluation of the African elephant as a focal species for connectivity planning in East Africa. **Diversity and Distributions** 17:603-612.
- Haig, S. M., W. M. Bronaugh, R.S. Crowhurst, J.D'Elia, C. A. Eagles-Smith, **C. W. Epps**, B. Knaus, M. P. Miller, M. L. Moses, S. Oyler-McCance, W. D. Robinson, & B. Sidlauskas [authors after Haig alphabetical]. 2011. Perspectives in ornithology: avian conservation genetics. **Auk** 128:205-229.
- Sawyer, S., **C. W. Epps**, & J. S. Brashares. 2011. Placing linkages among fragmented habitats: Do least-cost path models reflect how animals use landscapes? **Journal of Applied Ecology** 48:668-678.
- Epps, C. W.**, J. D. Wehausen, P. J. Palsboll, & D. R. McCullough. 2010. Using genetic tools to track desert bighorn sheep colonizations. **Journal of Wildlife Management** 74:522-531.
- Flesch, A. D., **C. W. Epps**, J. W. Cain III, M. Clark, P. R. Krausman, & J. R. Morgart. 2010. Potential effects of the United States-Mexico border fence on wildlife. **Conservation Biology** 24:171-181.
- Brashares, J. S., L. R. Prugh, C. J. Stoner, & **C. W. Epps**. 2010. Ecological and conservation implications of mesopredator release. Pages 221-240 in J. Terborgh & J. A. Estes, eds. *Trophic Cascades: predators, prey, and the changing dynamics of nature*. Island Press, Washington D.C., USA.
- Jones, T., **C. W. Epps**, B. M. Mbano, P. Coppolillo, B. M. Mutayoba, & F. Rovero. 2009. Maintaining ecological connectivity between the protected areas of south-central Tanzania: evidence and challenges. **Proceedings of the TAWIRI Scientific Conference**. 6:541-555.

- Prugh, L. R., C. J. Stoner, **C. W. Epps**, W. T. Bean, W. J. Ripple, A. S. Laliberte, & J. S. Brashares. 2009. The rise of the mesopredator. **Bioscience** **59**:779-789.
- Epps, C. W.**, J. D. Wehausen, V. C. Bleich, S. G. Torres, & J. S. Brashares. 2007. Optimizing dispersal and corridor models using landscape genetics. **Journal of Applied Ecology** **44**:714-724.
- Ramey II, R. R., J. D. Wehausen, H.-P. Liu, **C. W. Epps**, & L. M. Carpenter. How King *et al.* (2006) define an “evolutionarily distinct” subspecies: a response. **Molecular Ecology** **16**:3518-3521.
- Epps, C. W.**, P. J. Palsbøll, J. D. Wehausen, G. K. Roderick, & D. R. McCullough. 2006. Elevation and connectivity define genetic refugia for mountain sheep as climate warms. **Molecular Ecology** (fast track) **15**:4295-4302,
- Ramey, R. R. II, J. D. Wehausen, H.-P. Liu, **C. W. Epps**, & L. M. Carpenter. 2006. Should hypothesis testing or selective posthoc interpretation of results guide the allocation of conservation effort? **Animal Conservation** **9**:244-247.
- Epps, C. W.**, P. J. Palsbøll, J. D. Wehausen, G. K. Roderick, R. R. Ramey II, & D. R. McCullough. 2005. Highways block gene flow and cause a rapid decline in genetic diversity of desert bighorn sheep. **Ecology Letters** **8**:1029-1038.
- Epps, C. W.**, J. D. Wehausen, P. J. Palsbøll, & D. R. McCullough. 2005. Using genetic methods to describe and infer recent colonizations by desert bighorn sheep. Pp. 51-62 *in* Goerrissen, J., and J. M. Andre, editors. **Symposium Proceedings for the Sweeney Granite Mountains Desert Research Center 1978-2003; A Quarter Century of Research and Teaching.**
- Ramey II, R. R., H.-P. Liu, **C. W. Epps**, J. D. Wehausen, & L. M. Carpenter. 2005. Genetic relatedness of the Preble’s meadow jumping mouse (*Zapus hudsonius preblei*) to nearby subspecies of *Z. hudsonius* as inferred from variation in cranial morphology, mitochondrial DNA, and microsatellite data: implications for taxonomy and conservation. **Animal Conservation** **8**:329-346.
- Epps, C. W.**, D. R. McCullough, J. D. Wehausen, V. C. Bleich, & J. R. Rechel. 2004. Effects of climate change on population persistence of desert-dwelling mountain sheep in California. **Conservation Biology** **18**:102-113.
- Wehausen, J. D., R. R. Ramey II, & **C. W. Epps**. 2004. Experiments in DNA extraction and PCR amplification from bighorn sheep feces: the importance of DNA extraction method. **Journal of Heredity** **95**:503-509.
- Epps, C. W.**, J. D. Wehausen, V. C. Bleich, & S. G. Torres. 2003. Status of bighorn sheep in California. **Desert Bighorn Council Transactions** **47(2003)**:20-35.

MANUSCRIPTS SUBMITTED OR IN REVISION

(COPIES AVAILABLE ON REQUEST)

- Moriarty, K. M., M. A. Linnell, B. Chasco, **C. W. Epps**, W. Zielinski. *In review*. Can a carnivore home range be estimated in a day? *Journal of Mammalogy*.
- Sanchez, D. M., **C. W. Epps**, & D. S. Taylor. Estimating lead fragmentation from ammunition for muzzleloading and black powder cartridge rifles. *In revisions*. *Journal of Fish and Wildlife Management*.
- Linnell, M. A., **C. W. Epps**, E. D. Forsman, & W. J. Zielinski. *In 2nd revisions*. Survival and predation of short-tailed weasels in western Oregon. *Northwest Science*.
- Smythe, S. E., D. M. Sanchez, **C. W. Epps**. *In prep*. Influence of model structure, winter range, and winter severity on estimates of nutritional carrying capacity for moose of the Copper River Delta, AK. *Journal of Wildlife Management*.
- Nickerson, B. S., & **C. W. Epps**. *In prep*. Neutral genetic processes and population connectivity shape adaptive-linked genetic diversity of desert bighorn sheep in the Mojave Desert. *Conservation Genetics*.

REPORTS, BULLETINS, AND PROCEEDINGS (COPIES AVAILABLE ON REQUEST)

- Epps, C. W.**, D. Dekelaita, & B. Dugovich. *In press*. Updates on respiratory disease affecting desert bighorn sheep in and near Mojave National Preserve. Mojave National Preserve Science Newsletter **2016(1)**. Peer reviewed.
- Wehausen, J.D., & **C. W. Epps**. 2015. Protecting desert bighorn sheep migration corridors in the Mojave Desert. Op-ed, Daily Bulletin and others, Jan 12 2015..
- Epps, C. W.**, J. D. Wehausen, R. Monello & T. G. Creech. 2013. Potential impacts of proposed solar energy development near the South Soda Mountains on desert bighorn sheep connectivity. Unpublished report to California Dept. of Fish and Wildlife, National Park Service, and Bureau of Land Management. February 25, 2013.
- Epps, C. W.**, D. Schwalm, J. A. Castillo, T. Rodhouse, M. Jeffress, & C. Ray. 2013. Analysis of proposed rock quarrying and trail improvement impacts on American pikas in Grand Teton National Park. Unpublished report to Grand Teton National Park, National Park Service.
- Epps, C. W.**, and A. R. Davis. 2012. Genetic identification of individual black-tailed deer for mark-recapture population estimation. Report to Oregon Dept. of Fish and Wildlife.
- Garrett, L., M. Jeffress, M. Britten, **C. W. Epps**, C. Ray, & S. Wolff. 2011. Pikas in peril: multiregional vulnerability assessment of a climate-sensitive sentinel species. **Park Science** **28**:9-13.
- Krosby, M., **C. W. Epps**, A. Hatch, J. Lawler, B. McRae, H. Michael, S. O'Brien, J. Pierce, J. M. Scott, L. Svancara, & R. Unnasch. 2011. Western Governors' Association pilot project for the arid lands of Washington, Idaho, and Oregon: a framework for incorporating climate change into an integrated decision support system. Unpublished report to the Western Governors' Association.
- Epps, C. W.**, B. S. Nickerson, & D. H. Jackson. 2011. Impact of human recreational activity on movement and distribution of female Columbian white-tailed deer during fawning season on the North Bank Habitat Management Area, Oregon. Unpublished report to Oregon Department of Fisheries and Wildlife/Bureau of Land Management.
- Epps, C. W.**, J. A. Castillo, & R. Naidoo. 2011. Genetic structure of African buffalo populations in the Caprivi Strip, Namibia. Report to the World Wildlife Fund.
- Hixon, M. A., S. V. Gregory, W. L. Robinson, S. Baker, **C. W. Epps**, et al. 2010. 2010 Oregon Climate Assessment: Effects of Climate Change on Oregon's Fish, Wildlife, and Ocean. Report to the Oregon Legislature. Peer reviewed.
- Epps, C. W.** 2009. Udzungwa-Ruaha Corridor and Udzungwa-Mikumi Corridor. Pp. 27-28 *in* T. Jones, T. Caro, and T. Davenport, editors. Wildlife corridors in Tanzania. Unpublished report to the Tanzanian Wildlife Research Institute.
- Epps, C. W.**, B. M. Mutayoba, S. K. Wasser, & J. S. Brashares. 2008. Past and present connectivity of wildlife populations in Tanzania, East Africa. Unpublished report to the Tanzanian Wildlife Research Institute.
- Epps, C. W.**, B. M. Mutayoba, B. M. Mbano, P. Coppolillo, S. K. Wasser, & J. S. Brashares. 2007. Past and present connectivity of wildlife populations in Tanzania, East Africa. Unpublished report to the Tanzanian Wildlife Research Institute.

RESEARCH GRANTS AND CONTRACTS

2016	Oregon Department of Fish and Wildlife. "Characterizing the Spread and Consequences of Respiratory Disease for Bighorn Sheep in Southeastern Oregon"	\$195,337
2015	National Foundation of Wildlife and Fish (D. Schwalm, lead PI). "Swift fox distribution assessment and reintroduction strategy".	\$127,619
2015	USGS. "Evaluating adaptive capacity of desert bighorn sheep to climate change: identifying genetic links to climate adaptation in native and reintroduced	\$175,212

	populations.”	
2015	Native Village of Eyak. “Copper River Delta moose herd genetic study.”	\$58,880
2015	Confederated Tribes of Grand Ronde. “Black-tailed deer genetic mark-recapture”.	\$20,000
2015	Oregon Dept. of Fish and Wildlife. “Black-tailed deer fecal DNA analysis for Mark-Recapture Population Estimation” (continuation).	\$359,322
2015	National Park Service. “Evaluating impacts of a pneumonia epizootic and potential for disease transmission among desert bighorn sheep herds in and near Mojave National Preserve” (continuation).	\$20,000
2015	USFS. “Annual variation in abundance of small mammals on the H. J. Andrews Experimental Forest, Oregon.” (continuation).	\$40,000
2014	USGS. “Evaluating adaptive capacity of desert bighorn sheep to climate change: Identifying genetic links to climate adaptations in native and reintroduced populations.” \$40,082 subcontract from NMSU.	\$200,212
2014	CA Chapter of Wild Sheep Foundation. “Characterizing the spread and consequences of respiratory disease for desert bighorn sheep in the eastern Mojave Desert.”	\$183,658
2014	USGS. “Response of desert bighorn sheep in the Mojave National Preserve to respiratory disease.”	\$209,568
2014	USDA-Wildlife Services. Landscape genetics of beaver in the Oregon Coast Range	\$23,031
2014	National Park Service. “Evaluating impacts of a pneumonia epizootic and potential for disease transmission among desert bighorn sheep herds in and near Mojave National Preserve.”	\$157,625
2014	Oregon Dept. of Fish and Wildlife. “Black-tailed deer fecal DNA analysis for Mark-Recapture Population Estimation” (continuation).	\$168,000
2014	USFS. “Annual variation in abundance of small mammals on the H. J. Andrews Experimental Forest, Oregon.” (continuation).	\$250,484
2014	Confederated Tribes of Grand Ronde. “Black-tailed deer genetic mark-recapture”.	\$5,000
2013	Oregon Dept. of Fish and Wildlife. “Black-tailed deer fecal DNA analysis for Mark-Recapture Population Estimation”.	\$165,649
2013	USFS. “Habitat use and movement behavior of marten” (continuation).	\$16,000
2012	Oregon Dept. of Fish and Wildlife. “Black-tailed deer fecal DNA analysis”.	\$48,000
2012	USFS. “Annual variation in abundance of small mammals on the H. J. Andrews Experimental Forest, Oregon.” (continuation).	\$125,324
2012	NPS. “Connectivity and habitat quality of desert bighorn sheep populations.”	\$17,446
2012	USFS. “Habitat use and movement behavior of marten” (continuation).	\$89,483
2011	NPS. “Assessing climate refugia and connectivity for desert bighorn sheep” (continuation).	\$14,632
2011	USFS. “Annual variation in abundance of small mammals on the H. J. Andrews Experimental Forest, Oregon.” (continuation).	\$198,000
2011	USFS. “Habitat use and movement behavior of marten” (continuation).	\$194,000
2010	USFS. “Annual variation in abundance of small mammals on the H. J. Andrews Experimental Forest, Oregon.”	\$213,654
2010	NPS. “Pikas in western national parks: vulnerability assessment of a climate-sensitive sentinel species.”	\$713,368
2010	NPS. “Assessing climate refugia and connectivity for desert bighorn sheep.”	\$414,490
2010	USFWS. “Optimizing genetic connectivity models for the American pika.”	\$22,000

2010	USFS. "Habitat use and movement behavior of marten" (continuation).	\$176,421
2009	USGS. "Optimizing genetic connectivity models for the American pika."	\$75,000
2009	USFS. "Habitat use and movement behavior of marten."	\$166,325
2008	World Wildlife Foundation. "Comparing ecological connectivity in conservation landscapes using movement and genetic data in African buffalo."	\$16,000
2006	National Science Foundation International Research Fellowship. "Past and present connectivity of wildlife populations in Tanzania, East Africa."	\$131,596
2006	California Dept. of Fish and Game, Resources Assessment Program	\$49,977
2004	Dept. of Environmental Science, Policy, and Management Travel Fellowship	\$400
2003	Safari Club International	\$5000
2003	Dept. of Environmental Science, Policy, and Management Travel Fellowship:	\$1220
2002	Dept. of Environmental Science, Policy, and Management Travel Fellowship	\$900
2001	Safari Club International	\$5000
2000	Safari Club International:	\$3500
2000	Berkeley Chapter of Sigma Xi, Grant-in-Aid-for-Research	\$200

HONORS/AWARDS/FELLOWSHIPS

2013	R. M. Wade Award for Excellence in Teaching, College of Agricultural Science, Oregon State University
2011	Savery Outstanding Young Faculty Award, College of Agricultural Science, Oregon State Univ.
2006	National Science Foundation International Research Fellowship (2 years)
2005	The Society for Conservation Biology Student Presentation Award (1 st place, 19 th annual meeting)
2003	The Walter and Ruth Schubert Prize in Ecosystem Science (to outstanding ESPM grad. student)
2000	Sigma Xi, University of California, Berkeley
1998	The Berkeley Fellowship for Graduate Study (a competitive fellowship for 3 years of support)
1998	National Science Foundation Graduate Research Fellowship (3 years)
1997	Phi Beta Kappa, Rice University
1997	Arthur B. Cohn Memorial Fellowship
1997	Hope and Byron Meredith Merit Scholarship

TEACHING

Classes taught (Oregon State University): Big Game Management, Mammalogy, Systematics of Mammals, Mammal Conservation and Management; group mentor for Fisheries and Wildlife Capstone course; Landscape Genetics (graduate seminar); Animal Ecology and Space Use (graduate seminar); Population Genetics (graduate reading seminar)

PROFESSIONAL ACTIVITIES AND SERVICE

Advisory panels & teams:

Sierra Nevada Bighorn Sheep Recovery Implementation Team (Spring 2011-present)
 Western Governors' Association Columbia Plateau Pilot Project Climate Team (Fall 2010-Summer 2011)
 Board member, Oregon Chapter of The Wildlife Society (June 2015-present)
 Technical Advisory Committee Member, Wild Sheep Foundation Rocky Crate Chair for Disease Research (fall 2015-present)

Manuscript and Grant Proposal Reviewer:

Ecology Letters, California Fish and Game, Nature, Journal of Wildlife Management, Conservation Genetics, Journal of Applied Ecology, Molecular Ecology, Ethology, Conservation Biology, Journal of Mammalogy, Journal of Arid Environments, Ecography, Animal Conservation, African Journal of Ecology, Proceedings of the Royal Society Series B, Journal of Visualized Experiments, Journal of Heredity, The Wildlife Professional, Landscape Ecology, National Science Foundation, National Geographic Society, EcoWatch, USGS internal reviewer.

Member:

Phi Beta Kappa, Sigma Xi, British Ecological Society, The Wildlife Society (National and Oregon Section), Society for Conservation Biology, American Society of Mammalogists, Desert Bighorn Council, Ecological Society of America

INVITED SEMINARS, OUTREACH, AND CONTRIBUTED TALKS

Invited seminars and public outreach

- Epps, C.W., L. Brown, D. Shepherdson, G. Herring. *Panel discussion- hunting with non-lead*. Lead ammunition symposium, Annual meeting of the Oregon chapter of The Wildlife Society, Feb 3, 2016.
- Co-organizer and moderator: *Hunting with non-lead ammunition: preserving hunting and wildlife for Oregon's future*. Workshop presented by Oregon Chapter of the Wildlife Society and Oregon Zoo, Portland, OR, Nov 20, 2015.
- Epps, C. W. *Connectivity and conservation*. Guest lecture, Conservation Biology, Mary Baldwin College, Staunton Virginia, Nov. 17 2015.
- Co-organizer: Non-lead ammunition demonstration and public workshop, Albany Rifle and Pistol Club, with OR-TWS, USFWS, ODFW, and Oregon Zoo. July 11, 2015.
- Epps, C. W., T. Besser, S. Subramaniam, B. Gonzales, P. Wolff. *Panel discussion- pneumonia in desert bighorn sheep*. Desert Bighorn Council Meeting, Borrego Springs, California, April 15, 2015.
- Epps, C. W. *Movement, fragmentation, and emerging disease outbreaks: new considerations to managing desert bighorn sheep* (*Ovis canadensis nelsoni*). Oregon State Dept. of Fisheries and Wildlife, departmental seminar, March 4, 2015
- Epps, C. W. *Desert bighorn sheep disease monitoring and updates*. Desert Bighorn Sheep Summit, Rancho Cordova, California (April 24, 2015).
- Epps, C. W. *Considering the switch: challenges of transitioning to non-lead ammunition*. Rocky Mountain Elk Foundation, Oregon Rendezvous, Lake Creek Camp, Oregon (July 12 2014).
- Epps, C. W. *Genetic structure, connectivity, and implications for disease spread for desert bighorn sheep in California, Nevada, and Arizona*. Desert Bighorn Sheep Summit, Rancho Cordova, California (May 2 2014).
- Epps, C. W. *Wildlife and Lead: Understanding the issues and working together to reduce exposure in the PNW*. Oregon Zoo, Portland, OR (Nov. 22, 2013).
- Epps, C. W. *Dirt and DNA- inferring population connectivity at different temporal scales*. Ecology and Evolutionary Biology Seminar Series, Oregon State University (Nov. 8, 2012).
- Epps, C. W. *Mammals and climate change in the western United States: what do we really know?* Willamette National Forest Climate Change Symposium, Springfield, Oregon (Apr. 5, 2012).
- Epps, C. W. *Contrasting connectivity across species and time scales for large mammals in East Africa*. James Madison University, Dept. of Biology (Mar. 30 2012).
- Epps, C. W. *Inferring connectivity past and present for East African large mammals*. University of Missouri, Division of Biological Sciences (Oct. 19, 2011)
- Epps, C. W. *Movement of large mammals among reserves in Tanzania*. The Audubon Society, Corvallis Chapter, Corvallis, OR (Mar. 17, 2011).
- Epps, C. W. *Confessions of a wildlife biologist*. The Benton Bowhunters Society, Corvallis, OR (Jan. 29, 2011).

- Epps, C. W. *Inferring connectivity from genetic structure and field data: case studies from bighorn sheep and large mammals in East Africa*. University of Idaho, Dept. of Fish and Wildlife Resources Seminar (Dec. 1, 2010)
- Epps, C. W. Washington Wildlife Habitat Connectivity Working Group, Transboundary Summit, Richland, WA (Workshop participant, April 19-20, 2010).
- Epps, C. W. *Inferring connectivity from genetic structure*. Northern Arizona University, Department of Forestry Seminar (Invited seminar, Nov 18, 2009).
- Epps, C. W. *Issues in the management of wild mammals: historical and international perspectives*. Academy of Lifetime Learning, Corvallis, OR (Sept. 24, 2009).
- Epps, C. W. *Assessing connectivity of wildlife populations in East African protected areas*. UC Berkeley, Dept. of Environmental Science, Policy, & Management Wildlife Lecture series (Feb 24, 2006).
- Epps, C. W. *Population processes in a changing climate: extinction, dispersal, and metapopulation dynamics of desert bighorn sheep*. Golden Gate Chapter Meeting of Safari Club International (Mar. 2005).
- Epps, C. W. *Fragmenting the fragments: colonization, gene flow, and the effect of highways on desert bighorn sheep*. UC Berkeley, Dept. of Environmental Science, Policy, & Management Wildlife Lecture series (Apr. 2004).
- Epps, C. W. *Climate change and extinction risk of desert bighorn sheep*. Golden Gate Chapter Meeting of Safari Club International (Mar. 2002).
- Epps, C. W. *Causes of extinction of desert bighorn sheep populations in California*. University of California-San Diego White Mountain Research Station, Summer Short Course (Jun. 2000).
- Epps, C. W. *Indigenous use of wildlife resources in northeastern Brazil*. UC Berkeley, Dept. of Environmental Science, Policy, & Management Wildlife Lecture series (Feb. 1999).

Contributed and invited scientific presentations as primary author or presenter

- Epps, C. W., J. A. Castillo, T. G. Creech, R. S. Crowhurst, D. Schwalm. *Beyond resistance: applying landscape genetics to conservation and ecological problems*. **Invited speaker and symposium co-organizer**, Landscape Genetics Symposium, International Association of Landscape Ecologists, annual meeting Portland July 9, 2015.
- Epps, C. W.**, & R. S. Crowhurst. *Changes in genetic structure of a desert bighorn sheep metapopulation over two generations*. **Invited speaker**, Desert Bighorn Council Meeting, Borrego Springs, California, April 15, 2015.
- Epps, C. W.** & J. D. Wehausen. *Genetic structure, connectivity, and implications for disease spread for desert bighorn sheep*. Interagency Desert Bighorn Sheep Disease Meeting. Laughlin, Nevada (May 19 2014).
- Epps, C. W.** *Communication breakdown: discussing the technical complexity and challenges of switching to lead-free ammunition*. **Invited speaker**, Annual Meeting of the Oregon Chapter of The Wildlife Society, Bend, Oregon (February 6 2014).
- Sanchez, D. S., **C. W. Epps**, & D. M. Taylor. 2013. *Estimation of lead fragmentation from ammunition for muzzleloading and black powder cartridge rifles: implications for human and wildlife consumers?* The Wildlife Society 20th Annual Meeting, Milwaukee, Wisconsin. Contributed paper (co-presented by Epps).
- Epps, C. W.**, S. K. Wasser, J. Keim, B. M. Mutayoba, & J. S. Brashares. 2013. *Quantifying past and present connectivity illuminates a rapidly-changing landscape for the African elephant*. US-International Associate of Landscape Ecology Conference, Austin, Texas (**Invited speaker**, Landscape Genetics Symposium).
- Taylor, D., D. M. Sanchez, & **C. W. Epps**. 2013. *Lead fragmentation from muzzle-loaded and black powder ammunition*. OR-WA Meeting of The Wildlife Society, Skamania, Washington. Contributed paper (co-presented by Epps).
- Creech, T. G., **C. W. Epps**, J. D. Wehausen, & R. Monello. 2012. *Prioritizing conservation actions in a fragmented metapopulation of desert bighorn sheep*. Renewable Energy Development Symposium, North

American Chapter of the Society for Conservation Biology, Oakland, California. **Invited speaker** (presented by Epps).

- Epps, C.W.**, S. K. Wasser, J. Keim, B. M. Mutayoba, & J. S. Brashares. 2012. *Using occurrence and genetic data to contrast past and present connectivity for the African elephant*. International Congress on Wildlife Management, Durban, South Africa. Contributed paper.
- Epps, C. W.** 2011. *Genetic approaches to optimizing connectivity models*. Animal Movement and Gene Flow workshop, Oregon Chapter of the Wildlife Society Annual Meeting, Bend, USA (**Co-organizer and speaker**).
- Epps, C. W.**, B. M. Mutayoba, R. S. Crowhurst, S. K. Wasser, J. S. Brashares. 2010. *Considering connectivity for multiple species at multiple scales in Tanzania, East Africa*. Ecological Society of America, Pittsburgh, USA (**Invited speaker**, Connectivity symposium).
- Epps, C. W.**, & J. D. Wehausen. 2009. *Why connectivity matters: bighorn sheep, climate, and rapid change on the land*. Oregon Chapter of The Wildlife Society, Gleneden Beach, OR (**Invited speaker**).
- Epps, C.W.** 2008. *Landscape permeability needs of bighorn sheep*. Pacific Northwest Wildlife Connections Symposium, Oregon Zoo (**Invited speaker**).
- Epps, C.W.**, B. M. Mutayoba, and J. S. Brashares. 2008. *Assessing connectivity of wildlife populations in Tanzania: Too little, too late, or just in time?* Society for Conservation Biology Annual International Meeting, Chattanooga TN. Contributed paper.
- Epps, C. W.**, J. D. Wehausen, V. Bleich, S. Torres, and J. Brashares. 2007. *Are elephant corridors wildlife highways?* Society for Conservation Biology, Port Elizabeth, South Africa. Contributed paper.
- Epps, C. W.** 2007. *Bighorn sheep and interstate highways*. International Conference on Ecology and Transportation, Little Rock, USA. Contributed paper.
- Epps, C. W.**, P. Palsboll, J. Wehausen, G. Roderick, & D. R. McCullough. 2006. *Elevation and connectivity define genetic refugia for mountain sheep*. Society for Conservation Biology, San Jose, USA. Contributed paper.
- Epps, C. W.**, P. Palsboll, J. Wehausen, G. Roderick, R. Ramey, & D. R. McCullough. 2006. *Highways affect gene flow and genetic diversity for bighorn sheep*. North American Wild Sheep and Goat Council, Kanaskis, Canada. (**Invited speaker and discussant**).
- Epps, C. W.**, P. Palsboll, J. Wehausen, G. Roderick, R. Ramey, & D. R. McCullough. 2005. *Major highways block gene flow and decrease genetic diversity*. Society for Conservation Biology, Brasilia, Brazil. Contributed paper.
- Epps, C. W.**, J. D. Wehausen, & D. R. McCullough. 2005. *Inferring recent colonizations by desert bighorn sheep*. Desert Bighorn Council, Alpine, Texas. Contributed paper.
- Epps, C. W.**, J. D. Wehausen, & D. R. McCullough. 2005. *How precipitation, elevation, and temperature affect diet quality of desert bighorn sheep*. Western Section of the Wildlife Society, Sacramento, California. Contributed paper.
- Epps, C. W.**, J. D. Wehausen, V. Bleich, J. Rechel, & D. R. McCullough. 2003. *Effects of climate change on desert bighorn sheep*. Society for Conservation Biology, Duluth, Minnesota. Contributed paper.
- Epps, C. W.** 2002. *Using fecal DNA to examine bighorn sheep dispersal and gene flow*. Society for Conservation Biology, Canterbury, England. Contributed poster.
- Epps, C. W.**, J. D. Wehausen, & D. R. McCullough. 2000. *Climate change and the desert bighorn sheep*. Western Section of the Wildlife Society, Riverside, California. Contributed paper.

Contributed presentations as coauthor

- Masseloux, J., **C. W. Epps**, M. Wykstra, D. Schwalm. 2016. Anthropogenic and environmental influences on landscape use by large carnivores in East Africa. Research Advances in Fisheries and Wildlife (RAFWE), Oregon State University, Corvallis, OR, Feb 19, 2016.

- Holton, B., R. Monello, & **C. W. Epps**. 2015. *Status report of desert bighorn sheep in Grand Canyon National Park*. Desert Bighorn Council meetings, Borrego Springs, CA, April 8, 2015. Contributed paper.
- Dekelaita, D., **C. W. Epps**, J. D. Wehausen, D. Hugson, N. Darby, & R. Abella. 2015. Integrating radio-collar and camera data to assess impacts of pneumonia in the Mojave Desert: a study design. Desert Bighorn Council meetings, Borrego Springs, CA, April 8, 2015. Contributed poster.
- Roug, A., B. Gonzales, S. Torres, P. Wolff, M. Cox, D. Schaible, **C. W. Epps**, D. Dekelaita, C. Kreuder-Johson 2015. *Respiratory disease and Mycoplasma ovipneumoniae in desert bighorn sheep of California, Nevada, and Utah*. Desert Bighorn Council meetings, Borrego Springs, CA, April 8, 2015. Contributed paper.
- Dugovich, B., **C. W. Epps**, B. Beechler, B. Dolan, B. Gonzalez, A. Jolles. 2015. Desert bighorn sheep immunity during a *Mycoplasma ovipneumoniae* outbreak. Desert Bighorn Council meetings, Borrego Springs, CA, April 8, 2015. Contributed paper.
- Schwalm, D., **C. W. Epps**, T. J. Rodhouse, W. B. Monahan, J. A. Castillo, C. Ray, & M. R. Jeffress. 2015. *Pikas in Peril? A multi-regional assessment of climate-related vulnerability*. Third conference, North American Pika Consortium. Golden, CO, April 2015. Invited talk.
- Moriarty, K., & **C. W. Epps**. 2015. Retained satellite information influences GPS performance: a case study with Pacific marten. Washington Section of the Wildlife Society Annual Meeting, April 17, 2015. Contributed paper.
- Taylor, J., V. Petro, **C. W. Epps**, & R. Crowhurst. 2015. Dispersal and landscape genetics of American beaver within coastal Oregon basins. Annual Meeting, Oregon Chapter of The Wildlife Society, Eugene, OR. April 29 2015. Contributed poster.
- Minton-Edison, P., **C. W. Epps**, R. S. Crowhurst, D. Jackson. 2015. Genetic structure of blacktailed deer (*Odocoileus hemionus columbianus*) across four wildlife management units in Oregon. Annual Meeting, Oregon Chapter of The Wildlife Society, Eugene, OR. April 29 2015. Contributed poster. **Best undergraduate poster award.**
- Schwalm, D., **C. W. Epps**, T. J. Rodhouse, W. B. Monahan, J. A. Castillo, C. Ray, & M. R. Jeffress. 2015. Projecting futures for the American pika, a climate indicator species, in Rocky Mountain National Park. Rocky Mountain National Park, Biennial Research Symposium, March 3-5 2-15. Contributed paper.
- Tweedy, P. J., K. M. Moriarty, J. D. Perrine, C. W. Epps, W. J. Zielinski. 2015. Methods change our impression of seasonal activity patterns by martens. Western Section of the Wildlife Society Annual Meeting. Santa Rosa, CA Jan 28 2015.
- Moriarty, K., C. W. Epps, M. G. Betts, J. D. Bailey, D. Hance, W. J. Zielinski. *When is a barrier a barrier? Incentive, season, and forest thinning affect movements by Pacific marten*. Annual meeting of The Wildlife Society, Pittsburg, PA, Oct 27, 2014. Contributed paper.
- Spaan, R.S., **C. W. Epps**, V. O. Ezenwa, and A. E. Jolles. *Why did the buffalo cross the park? – Effects of condition, season, age, and disease on dispersal by female African buffalo (Syncerus caffer)*. North American Congress for Conservation Biology, Missoula, MT. 15 July 2014. Contributed paper.
- Moriarty, K. M., W. J. Zielinski, M. A. Linnell, P. J. Tweedy, & **C. W. Epps**. *Recommendations for GPS units with motion sensors for forest associated mustelids (>800g)*. 6th International Martes Symposium. Krakow, Poland. Contributed poster. July 2014.
- Moriarty, K. M., W. J. Zielinski, M. A. Linnell, P. J. Tweedy, & **C. W. Epps**. *When is a barrier a barrier? Incentive, season, and forest structure influence movement thresholds: a case study with American marten*. 6th International Martes Symposium. Krakow, Poland. Contributed paper, **best student talk award.** July 2014.
- Castillo, J. A., & **C. W. Epps**. *Landscape effects on gene flow of American pika: a comparative landscape genetics study*. North American Congress for Conservation Biology, Missoula, Montana. Contributed paper. July 15 2014.

- Schwalm, D, **C. W. Epps**, TJ Rodhouse, and JA Castillo. 2014. *Varying vulnerability of the American pika to climate change*. Oregon Chapter of The Wildlife Society, Bend, Oregon. Contributed paper. Feb. 2014.
- Nickerson, B. S., & **C. W. Epps**. 2014. *Population connectivity predicts adaptive-linked genetic diversity of desert bighorn sheep (Ovis canadensis nelsoni)*. The American Genetics Association Annual Meeting, Seattle, WA. Contributed poster. June 2014.
- Sage, A. H., C. W. Epps, B. K. Johnson, & L. P. Waits. 2014. *Estimating density of a black bear population in northeastern Oregon using dogs and genetic mark-recapture techniques*. Oregon-TWS Annual Conference, Bend, OR. Contributed poster- **best undergraduate poster award**. Feb. 2014.
- Linnell, M., **C. W. Epps**, & E. Forsman. 2014. *Short tailed weasel space use in managed forests*. Oregon-TWS Annual Conference, Bend, OR. Contributed paper. Feb. 2014.
- Moriarty, K. M., **C. W. Epps**, M. G. Betts, J. Bailey, D. Hance, and W. J. Zielinski. 2014. *When is a barrier a barrier? Forest structure, season, and incentive influence movement thresholds and habitat use*. Western Section-TWS Annual Conference, Reno, NV and Oregon-TWS Annual Conference, Bend, OR. Contributed paper. Feb. 2014.
- Schwalm, D. L., **C. W. Epps** and T. J. Rodhouse. 2013. Location matters: geographical variation in predicted effects of climate change on site occupancy of American pikas (*Ochotona princeps*). 4th Annual Pacific Northwest Climate Science Conference, Portland, OR USA. Contributed poster.
- Nickerson, B. S., & **C. W. Epps**. 2013. *Isolation predicts both neutral and adaptive-linked genetic diversity of desert bighorn sheep populations*. The International Congress for Conservation Biology, Baltimore, MD. Contributed paper.
- Castillo, J.A. & **C.W. Epps**. 2013. *Landscape genetics of American pika at Crater Lake National Park, Oregon: evaluating the use of Mantel tests in a causal modeling framework*. The International Congress for Conservation Biology, Baltimore, MD, July 2013. Contributed paper. **Student Award Competition Finalist**.
- Moriarty, K. M., & **C. W. Epps**. 2013. *Describing marten activity patterns using accelerometers*. Society for Northwestern Vertebrate Ecologists, Squamish, British Columbia. Contributed paper. **Best student talk**.
- Linnell, M. & **C. W. Epps**. 2013. *Seasonal movement and cause-specific mortality of short-tailed weasels in a managed forest landscape in western Oregon*. Society for Northwestern Vertebrate Ecologists, Squamish, British Columbia. Contributed paper.
- Jackson, D.H., K.L. Kohl, and **C.W. Epps**. 2013. *Black-tailed deer fecal DNA sampling in western Oregon- preliminary efforts*. OR-WA Meeting of The Wildlife Society, Skamania, Washington. Contributed paper.
- Crowhurst, R., B. Mutayoba, and **C. W. Epps**. 2012. *Comparative analysis of landscape features affecting historical connectivity of ungulate species in Tanzania, East Africa*. 19th Annual Meeting of The Wildlife Society, Portland OR. Contributed paper.
- Tweedy, P., K.M. Moriarty, **C.W. Epps**. 2012. *Activity patterns of Martes caurina identified through camera traps and GPS collars*. The Wildlife Society 19th Annual Meeting, Portland, OR. Contributed poster (Student Research in Progress).
- Castillo, J. A., **C. W. Epps**, & A. R. Davis. 2012. *Modeling connectivity and gene flow of American pikas in National Parks in the Western United States*. The Wildlife Society 19th Annual Meeting, Portland, Oregon. Contributed poster (Student Research in Progress).
- Nickerson, B.S., & **C.W. Epps**. 2012. Landscape effects on genetic diversity of immune loci in desert bighorn sheep. The Wildlife Society 19th Annual Meeting, Portland, Oregon. Contributed poster (Student Research in Progress Section).
- Crowhurst, R., and **C. W. Epps**. 2012. *Landscape features affecting historical connectivity of ungulate species in Tanzania*. Oregon Chapter of The Wildlife Society, Salishan, OR. Contributed paper.

- Creech, T. G., **C. W. Epps**, J. D. Wehausen, & R. Monello. 2012. *Prioritizing management of a desert bighorn sheep metapopulation using network theory*. RAFWE Graduate Research Symposium, Oregon State University. Contributed paper.
- Moriarty, K. M., L. J. Kreiensieck, & **C. W. Epps**. 2012. *Micro-GPS collar (40-44g) effectiveness and precision: methods and preliminary results of movement tests*. West Coast Fisher Symposium (at the Western Section of The Wildlife Society annual meeting). Contributed poster.
- Delhiemer, M., M. Linnell, K. M. Moriarty, and C. W. Epps. 2012. *Resting structure and location use by American martens, Lassen National Forest, CA*. West Coast Fisher Symposium (at the Western Section of The Wildlife Society annual meeting). Contributed poster.
- Nickerson, B., & C. W. Epps. 2012. *Population isolation and functional genetic diversity of desert bighorn sheep*. RAFWE, Oregon State University. Contributed poster.
- Castillo, J., & C. W. Epps. 2012. *Comparing genetic structure of American pika populations at different elevations: how does the spatial scale of gene flow vary among landscapes?* North American Chapter of the Society for Conservation Biology. Contributed talk.
- Moriarty, K. M., M. A. Linnell, & **C. W. Epps**. 2011. *Characteristics of American marten rest sites and stands, Lassen National Forest, California*. The International Conference of The Wildlife Society. Contributed talk (Student Research in Progress Section).
- Crowhurst, R., and **C. W. Epps**. 2011. *Connectivity of impala (Aepyceros melampus) populations across Tanzanian parks and reserves*. American Society of Mammalogists, June 2011. Contributed poster.
- Wehausen, J. D., & **C. W. Epps**. 2011. *Desert bighorn metapopulation dynamics in California: translating analysis of past extinction patterns into conservation planning*. Desert Bighorn Council Meetings. Contributed paper.
- Jones, T., **C. W. Epps**, B. M. Mbano, P. Coppolillo, B. M. Mutayoba, & F. Rovero. 2009. *Maintaining ecological connectivity between the protected areas of south-central Tanzania: evidence and challenges*. TAWIRI Scientific Conference, Arusha, Tanzania. Contributed paper.